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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,227	08/03/2006	Tetsuhiro Ishikawa	128935	5418
25944 OLIFF & BERI	7590 09/09/201 RIDGE, PLC	EXAMINER		
P.O. BOX 3208	350	SLIFKA, COLIN W		
ALEXANDRIA, VA 22320-4850			ART UNIT	PAPER NUMBER
			1793	
			NOTIFICATION DATE	DELIVERY MODE
			09/09/2010	ELECTRONIC

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction25944@oliff.com jarmstrong@oliff.com

## Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)		
10/588,227	ISHIKAWA ET AL.		
Examiner	Art Unit		
COLIN W. SLIFKA	1793		

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The MAILING DATE of this communication appe	ars on the cover sheet with the	correspondence add	ress
THE REPLY FILED <u>27 August 2010</u> FAILS TO PLACE THIS AF			
1.  The reply was filed after a final rejection, but prior to or on application, applicant must timely file one of the following rapplication in condition for allowance; (2) a Notice of Apperor Continued Examination (RCE) in compliance with 37 C periods:	the same day as filing a Notice of replies: (1) an amendment, affidavi al (with appeal fee) in compliance	Appeal. To avoid abar it, or other evidence, w with 37 CFR 41.31; or	which places the r (3) a Request
a) The period for reply expires 3 months from the mailing date b) The period for reply expires on: (1) the mailing date of this Ac no event, however, will the statutory period for reply expire la Examiner Note: If box 1 is checked, check either box (a) or (I MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f	dvisory Action, or (2) the date set forth ter than SIX MONTHS from the mailing b). ONLY CHECK BOX (b) WHEN THE ).	g date of the final rejection E FIRST REPLY WAS FI	on. LED WITHIN TWO
Extensions of time may be obtained under 37 CFR 1.136(a). The date of have been filed is the date for purposes of determining the period of extunder 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL	ension and the corresponding amount hortened statutory period for reply origi	of the fee. The appropria inally set in the final Office	ate extension fee be action; or (2) as
<ol> <li>The Notice of Appeal was filed on A brief in compl filing the Notice of Appeal (37 CFR 41.37(a)), or any exter Notice of Appeal has been filed, any reply must be filed wi AMENDMENTS</li> </ol>	sion thereof (37 CFR 41.37(e)), to	avoid dismissal of the	
3. The proposed amendment(s) filed after a final rejection, be  (a) They raise new issues that would require further core  (b) They raise the issue of new matter (see NOTE below  (c) They are not deemed to place the application in bett appeal; and/or  (d) They present additional claims without canceling a content of the second c	isideration and/or search (see NO w); er form for appeal by materially re orresponding number of finally rej	TE below); ducing or simplifying t	
NOTE: <u>See Continuation Sheet</u> . (See 37 CFR 1.124.  The amendments are not in compliance with 37 CFR 1.125. Applicant's reply has overcome the following rejection(s):	1. See attached Notice of Non-Co		,
<ul> <li>Newly proposed or amended claim(s) would be all non-allowable claim(s).</li> <li>For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is proved the status of the claim(s) is (or will be) as follows: Claim(s) allowed:</li> </ul>	☑ will not be entered, or b) ☐ wil	•	-
Claim(s) objected to: Claim(s) rejected: <u>1,2 and 6-12</u> . Claim(s) withdrawn from consideration:  AFFIDAVIT OR OTHER EVIDENCE			
<ol> <li>The affidavit or other evidence filed after a final action, but because applicant failed to provide a showing of good and was not earlier presented. See 37 CFR 1.116(e).</li> </ol>	sufficient reasons why the affidav	it or other evidence is	necessary and
9. The affidavit or other evidence filed after the date of filing a entered because the affidavit or other evidence failed to or showing a good and sufficient reasons why it is necessary	vercome <u>all</u> rejections under appea	al and/or appellant fail	s to provide a
10. ☐ The affidavit or other evidence is entered. An explanatior REQUEST FOR RECONSIDERATION/OTHER		•	
11. The request for reconsideration has been considered but See Continuation Sheet.	, , , , , ,	n condition for allowan	ce because:
<ul><li>12. ☐ Note the attached Information <i>Disclosure Statement</i>(s). (</li><li>13. ☐ Other:</li></ul>	PTO/SB/08) Paper No(s)		
/Melvin Curtis Mayes/ Supervisory Patent Examiner, Art Unit 1793	/COLIN W SLIFKA/ Examiner, Art Unit 1793		

Continuation of 3. NOTE: The proposed amendments are not entered because the limitations of claim 10 ("each of the phases in the voltage converter handles an alternating current...the change of the number of phases is conducted in a synchronized manner"), when brought into independent claims 2 and 6, change the scope of claims 2 and 6 and therefore would require further consideration. It should be noted that claim 9 of the proposed amendments (not entered) is dependent upon cancelled independent claim 1.

Continuation of 11. does NOT place the application in condition for allowance because: Applicant argues that the rejection of record does not teach instant claim 10. Said arguments are made in three parts, A, B, and C, respectively.

Regarding part A, Examainer states in the previous action that the instant claims base the operation of the converter on a value "equivalent to" the actual power passing through the converter. "Equivalent to" is not considered to be "actual," and therefore, Applicant's arguments are moot. Examiner further stated that even if the instant claims were drawn to the "actual power," as argued by Applicant, such an argument is not persuasive. While it is true that Tsuchiya teaches the controller 4 controls the DC-DC converters based on the demand output voltage from the inverter 2, Tsuchiya also teaches that controller 4 controls the converters based upon input/output current voltage information from current/voltage sensors 5 and 6, and battery voltage information, among others. Said current/voltage sensors are considered able to determine the power passing through the converters.

Regarding part B, Applicant argues that Peng does not teach that each of the phases in the voltage converter has an alternating current and has a different "phase shift" with respect to the other phases. Applicant further asserts that Peng is merely capable of handling various types of current. Examiner respectfully disagrees and refers to the rejection of record, which states "Peng teaches that three-phase bridge converters are typical voltage converters used with batteries, fuel cell stacks, etc. (col. 1, lines 19-22). Traditionally three-phase voltage converters include six switches, which are controlled by a control unit to provide a desired output (col. 1, lines 25-32). The invention of Peng includes a switch array that is controlled by a control unit to provide single or multiple phase power (col. 3, lines 65-67)." Examiner considers this to constitute a teaching of the instant claim.

Regarding part C, Applicant argues that the art of record does not teach that the change of number of phases is conducted in a synchronized manner. Applicant alleges that Examiner merely assumes that any control method would conduct the phase changes in a synchronized manner. Examiner disagrees, insofar as the controller in the rejection of record is considered to be capable of conducting the phase changes in a synchronized manner. Further, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a controller that changes the number of phases in a synchronized manner for the sake of organization and efficiency.